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the same or better level of control as the original sorbent.

(f) No kiln may use as a raw material or fuel any fly ash where the mercury content of the fly ash has been increased through the use of activated carbon, or any other sorbent, unless the facility can demonstrate that the use of that fly ash will not result in an increase in mercury emissions over baseline emissions (i.e., emissions not using the fly ash). The facility has the burden of proving there has been no emissions increase over baseline. Once the kiln must comply with a mercury limit specified in §63.1343, this paragraph no longer applies.

[75 FR 55054, Sept. 9, 2010]

§ 63.1347 Operation and maintenance plan requirements.

- (a) You must prepare, for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The plan must be submitted to the Administrator for review and approval as part of the application for a part 70 permit and must include the following information:
- (1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits and operating limits of §§63.1343 through 63.1348;
- (2) Corrective actions to be taken when required by paragraph §63.1350(f)(3);
- (3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year.
- (b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

[75 FR 55054, Sept. 9, 2010]

§63.1348 Compliance requirements.

(a) Initial compliance requirements. For an affected source subject to this subpart, you must demonstrate initial compliance with the emissions standards and operating limits by using the test methods and procedures in §§ 63.1349 and 63.7.

- (1) *PM compliance*. If you are subject to limitations on PM emissions under §63.1343(b), you must demonstrate initial compliance with the PM emissions standards by using the test methods and procedures in §63.1349(b)(1).
- (i) You must demonstrate initial compliance by conducting a performance test as specified in §63.1349(b)(1)(i).
- (ii) Compliance with the PM emissions standard must be determined based on the first 30 operating days you operate a PM CEMS.
- (2) Opacity compliance. If you are subject to the limitations on opacity under §63.1345, you must demonstrate initial compliance with the opacity emissions standards by using the performance test methods and procedures in §63.1349(b)(2). The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in initial compliance with the standard.
- (3) D/F compliance. (i) If you are subject to limitations on D/F emissions under §63.1343(b), you must demonstrate initial compliance with the D/ F emissions standards by using the performance test methods and procedures in §63.1349(b)(3). The owner or operator of a kiln with an in-line raw mill must demonstrate initial compliance by conducting separate performance tests while the raw mill is operating and the raw mill is not operating. The D/F concentration must be determined for each run and the arithmetic average of the concentrations measured for the three runs must be calculated to determine compliance.
- (ii) If you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate initial compliance with the temperature operating limits specified in §63.1344 by using the performance test methods and procedures in §63.1349(b)(3)(ii) through (b)(3)(iv). The average of the run temperatures will determine the applicable temperature limit.
- (iii) If activated carbon injection is used and you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate initial compliance with the activated carbon injection rate operating limits specified in

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§63.1344 by using the performance test methods and procedures in §63.1349(b)(3)(v). The average of the run injection rates will determine the applicable injection rate limit.

- (iv) If activated carbon injection is used, you must also develop a carrier gas parameter during the performance test conducted under $\S 63.1349(b)(3)$ that meets the requirements of $\S 63.1349(b)(3)(vi)$. Compliance is demonstrated if the system is maintained within ± 5 percent accuracy during the performance test.
- (4)(i) THC compliance. If you are subject to limitations on THC emissions under §63.1343(b), you must demonstrate initial compliance with the THC emissions standards by using the performance test methods and procedures in §63.1349(b)(4)(i). The average THC concentration obtained during the first 30 operating days must be used to determine initial compliance.
- (ii) Total organic HAP emissions tests. If you elect to demonstrate compliance with the total organic HAP emissions limit under §63.1343(b) in lieu of the THC emissions limit, you must demonstrate initial compliance with the total organic HAP emissions standards by using the performance test methods and procedures in §63.1349(b)(4)(iii) and (b)(4)(iv).
- (iii) If you are demonstrating initial compliance, you must conduct the separate performance tests as specified in §63.1349(b)(4)(iii) while the raw mill kiln is operating and while the raw mill of the kiln is not operating.
- (iv) The average total organic HAP concentration measured during the initial performance test specified by §63.1349(b)(4)(iii) must be used to determine initial compliance.
- (v) The average THC concentration measured during the initial performance test specified by §63.1349(b)(4)(iv) must be used to determine the site-specific THC limit. This limit should be a weighted average of the THC levels measured during raw mill on and raw mill off testing.
- (5) Mercury compliance. If you are subject to limitations on mercury emissions in §63.1343(b), you must demonstrate initial compliance with the mercury standards by using the performance test methods and procedures

- in §63.1349(b)(5). You must demonstrate initial compliance by operating a mercury CEMS or a sorbent trap based integrated monitor. The first 30 operating days of daily mercury concentration data must be used to determine initial compliance.
- (6) HCl compliance. If you are subject to limitations on HCl emissions under §63.1343(b), you must demonstrate initial compliance with the HCl standards by using the performance test methods and procedures in §63.1349(b)(6).
- (i) For an affected source that is equipped with a wet scrubber or tray tower, you must demonstrate initial compliance by conducting a performance test as specified in §63.1349(b)(6)(i). The HCl concentration must be determined for each run and the arithmetic average of the concentrations measured for the three runs must be calculated to determine compliance. You must also have established appropriate site-specific parameter limits.
- (ii) For an affected source that is not equipped with a wet scrubber or tray tower, you must demonstrate initial compliance by operating a CEMS as specified in §63.1349(b)(6)(ii). The average hourly HCl concentration obtained during the first 30 operating days must be used to determine initial compliance.
- (b) Continuous compliance requirements. You must demonstrate continuous compliance with the emissions standards and operating limits by using the performance test methods and procedures in §§63.1350 and 63.8 for each affected source.
- (1) General requirements. (i) You must monitor and collect data according to §63.1350 and the site-specific monitoring plan required by §63.1350(o).
- (ii) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), you must operate the monitoring system and collect data at all required intervals at all times the affected source is operating. Any period for which data collection is required and the operation of the

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CEMS is not otherwise exempt and for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(iii) You may not use data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The owner or operator must use all the data collected during all other periods in assessing the operation of the control device and associated control system

(iv) Clinker production. If you are subject to limitations on PM emissions (lb/ton of clinker) or mercury (lb/MM tons of clinker) under §63.1343(b), you must demonstrate continuous compliance with the PM emissions standards by determining the hourly production rate of clinker according to the requirements of §63.1350(d).

(2) *PM compliance*. If you are subject to limitations on PM emissions under §63.1343(b), you must demonstrate continuous compliance with the PM emissions standards by using the monitoring methods and procedures in §63.1350(b) and (d).

(i) *PM CEMS*. You must demonstrate continuous compliance with the PM emissions standards by using the monitoring methods and procedures in §63.1350(b) for each affected source subject to PM emissions limitations. Continuous compliance is demonstrated by a 30-day rolling average PM emissions in lb/ton clinker, except for periods of startup and shutdown, where the compliance is demonstrated based on a 7-day rolling average.

(3) Opacity compliance. If you are subject to the limitations on opacity under §63.1345, you must demonstrate continuous compliance with the opacity emissions standards by using the

monitoring methods and procedures in §63.1350(f).

(i) Continuous compliance is demonstrated by conducting specified visible emissions observations and follow up opacity readings, as indicated in §63.1350(f)(1) and (f)(2). The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in compliance with the standard. Corrective actions must be initiated within one hour of detecting visible emissions.

(ii) COMS. If you install a COMS in lieu of conducting the daily visible emissions testing, you must demonstrate continuous compliance by operating and maintaining the COMS such that it meets the requirements of $\S 63.1350(f)(4)(i)$.

(iii) BLDS. If you install a BLDS on a raw mill or finish mill in lieu of conducting the daily visible emissions testing, you must demonstrate continuous compliance by operating and maintaining the BLDS such that it meets the requirements of $\S63.1350(f)(4)(ii)$.

(4) *D/F compliance*. If you are subject to a *D/F* emission limitation under §63.1343(b), you must demonstrate continuous compliance with the temperature operating limits specified in §63.1346 by using the installing, operating, and maintaining a continuous monitor to record the temperature of specified gas streams such that it meets the requirements of §63.1350(g). Continuous compliance is demonstrated by a 3-hour rolling average temperature.

(5)(i) Activated carbon injection compliance. If activated carbon injection is used and you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate continuous compliance with the activated carbon injection rate operating limits specified in §63.1346 by installing, operating, and maintaining a continuous monitor to record the rate of activated carbon injection that meets the requirements of §63.1350(h)(1). Continuous compliance is demonstrated by a 3-hour rolling average injection rate.

(ii) If you are subject to a D/F emission limitation under §63.1343(b), you

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must demonstrate continuous compliance with the activated carbon injection system gas parameter by installing, operating, and maintaining a continuous monitor to record the gas parameter that meets the requirements of §63.1350(h)(2). Continuous compliance is demonstrated by a 3-hour rolling average of the parameter value.

- (6) THC compliance. If you are subject to limitations on THC emissions under §63.1343(b), you must demonstrate continuous compliance with the THC emissions standards by using the monitoring methods and procedures in §63.1350 (i) and (j). Continuous compliance is demonstrated by a 30-day rolling average THC concentration, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average.
- (7) Mercury compliance. If you are subject to limitations on mercury emissions in §63.1343(b), you must demonstrate continuous compliance with the mercury standards by using the monitoring methods and procedures in §63.1350(k). Continuous compliance is demonstrated by a 30-day rolling average mercury emission rate in lb/MM tons clinker, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average mercury concentration.
- (8) HCl compliance. If you are subject to limitations on HCl emissions under §63.1343(b), you must demonstrate continuous compliance with the HCl standards by using the performance test methods and procedures in §63.1349(b)(6).
- (i) For an affected source that is not equipped with a wet scrubber or tray tower, you must demonstrate continuous compliance by using the monitoring methods and procedures in §63.1350(1)(1). Continuous compliance is demonstrated by a 30-day rolling average HCl concentration, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average.
- (ii) For an affected source that is equipped with a wet scrubber or tray tower, you must demonstrate continuous compliance by using the monitoring methods and procedures in §63.1350(1)(2). Continuous compliance is demonstrated by a 30-day rolling aver-

age of the required parameters, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average.

- (c) Changes in operations. (1) If you plan to undertake a change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under this subpart, the source must conduct a performance test as specified in §63.1349(b).
- (2) In preparation for and while conducting a performance test required in §63.1349(b), you may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in (c)(2)(i) through (c)(2)(iv) of this section are met. You must submit temperature and other monitoring data that are recorded during the pretest operations.
- (i) You must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart for any source, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph must include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under paragraph (c)(1) of this section, including when the planned operational change period would begin.
- (ii) The performance test results must be documented in a test report according to §63.1349(a).
- (iii) A test plan must be made available to the Administrator prior to performance testing, if requested.
- (iv) The performance test must be conducted completed within 360 hours after the planned operational change period begins.
- (d) General duty to minimize emissions. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be

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based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 55055, Sept. 9, 2010]

Monitoring and Compliance Provisions

§ 63.1349 Performance testing requirements.

- (a) Performance test results must be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(10) of this section, as well as all other relevant information. As described in §63.7(c)(2)(i), the site-specific plan to be followed during performance testing must be made available to the Administrator prior to testing, if requested.
- (1) A brief description of the process and the air pollution control system;
 - (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
 - (4) Test results:
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the performance test, prepara-

tion of standards, and calibration procedures:

- (7) Raw data sheets for field sampling and field and laboratory analyses;
 - (8) Documentation of calculations;
- (9) All data recorded and used to establish parameters for monitoring; and
- (10) Any other information required by the performance test method.
- (b)(1) *PM emissions tests*. (i)(A) If you are subject to the limitations on emissions of PM, you must install, operate, calibrate, and maintain a PM CEMS in accordance with the requirements in §63.1350(b).
- (B) You must determine, record, and maintain a record of the accuracy of the volumetric flow rate monitoring system according to the procedures in §63.1350(m)(5).
- (C) The initial compliance test must be based on the first 30 operating days in which the affected source operates using a CEMS. Hourly PM concentration and stack gas volumetric flow rate data must be obtained.
- (ii) You must determine the clinker production rate using the methods in §63.1350(d).
- (iii) The emission rate, E, of PM (lb/ ton of clinker) must be computed for each run using equation 3 of this section:

$$E = (C_s Q_s)/(PK)$$
 (Eq. 3)

Where:

E = emission rate of particulate matter, lb/ ton of clinker production;

 $\begin{aligned} &C_s = \text{concentration of particulate matter, gr/} \\ &scf; \end{aligned}$

 Q_s = volumetric flow rate of effluent gas, where C_s and Q_s are on the same basis (either wet or dry), scf/hr;

P = total kiln clinker production rate, ton/ hr; and

K = conversion factor, 7000 gr/lb.

(iv) When there is an alkali bypass associated with a kiln, the main exhaust and alkali bypass of the kiln must be tested simultaneously and the combined emission rate of particulate matter from the kiln and alkali bypass must be computed for each computed for each run using equation 4 of this section:

$$E_{c} = \frac{\left[\left(C_{sk} Q_{sk} \right) + \left(C_{sb} Q_{sb} \right) \right]}{K P}$$
 (Eq. 4)